Notes – MPARWG – November 14 – 16, 2006, University of Maryland
(Items with (*) have accompanying presentation slides)

November 14, AM

1. Frank Lindsay – Opening Remarks (*)

Frank Lindsay briefed the WG on NASA HQ's perspective on why we need metrics and addressed several issues related to metrics.

Why We Need Metrics

* ES data systems represent a significant NASA investment

* Mandates from Federal and NASA stakeholders

* Metrics aid strategic planning for new / improved data system capabilities

* The data demonstrates our importance and effectiveness in supporting science

Updates / Issues

* Taking steps to engage HQ science management (study managers, program scientists)

* Metrics are owned by the MPARWG. WG acknowledged as the metrics experts.

* Metrics will be key to management and planning SOA, services, distributed systems, evolution.

Quantity and / vs Quality

* Dynamic tension between quantifiable vs non-quantifiable metrics

* NASA needs both quantitative and qualitative / non-quantifiable measures.

* Need to address both quantitative and non-quantitative "nugget" metrics collection

Do the Metrics Have Impact?

* Yes. Impact varies with audience. Even to OMB in highly aggregated form, have impact up and down the ladder.

* Need ongoing improvement of collection as well as mining of nuggets.

* Trend underway is to use these data for assessment of data system components and their functions.

MPARWG is Needed – How?

* Forward thinking about role and use of metrics data

* Determine how smaller, more distributed systems impact metrics collection and reporting

* How do we count services?

* How do we maintain coherence / integrity as we need to make changes / alter the data.

* Demonstrate how we are supporting science, what science is done that requires our data, support by our data systems.

2. Rama – Review of Action Items from October 2005 meeting (*)

Paul Davis – Frank Lindsay now has more overall responsibility for metrics at HQ, working with Martha Maiden.

Glossary – Paul Davis has entered definition of terms for glossary. These are available at the metrics reporting web site (http://reason-projects-ebooks.gsfc.nasa.gov/reason/). It is possible to display the entire glossary or click on a word or phrase that appears in blue and get its definition from the gloassary. All MPAR-WG members and projects are encouraged to look at the glossary, suggest changes and/or additions.

Greg Hunolt – GSFC could use Net Tracker tool (or equivalent) to monitor the metrics website – e.g. track access by study managers.

Paul Davis – Net Tracker difficult to maintain, full version is expensive, would not recommend for small projects.

Jim Gallagher – a number of free tools exist. Net crawlers can be used to derive server metrics but can be difficult to write.

Action Item 1: Keep "Characterizing Distributed Systems", Jim Gallagher actionee to first define what action is needed. Jim – what can be directly measured, what fits within current framework, what new measures might be needed.

Action Item 2: Evaluate user satisfaction metrics, keep as an action, do a white paper to submit to HQ. Greg Hunolt and Ron Weaver.

3. FY06 Metrics Collection and Reporting Review (*)

Action Item 3: Ask NASA headquarters if Impact Metrics can be made visible to all projects. Greg Hunolt is to query projects to see if they would be willing to share; Rama is to ask HQ for approval.

Action Item 4: Passing Impact Metrics to David Herring / NASA Outreach for wider distribution, Rama to discuss this with Frank Lindsay.

Action Item 5: See if we have information from projects about automated collection of metrics at their sites, e.g. Net Tracker or equivalent on their websites, some other tool for their FTP sites. Greg Hunolt will ask activities that may have used such a tool what they are using.

4. Implementing Revised FY2007 Metrics (*)

November 15, AM

5. Paul Davis – Demoed Metrics Tool and new features

Greg Hunolt will check status of PI information on the metrics website.

Saurabh Channan will put Jody Garner's email address on the 'PI info change' link.

REASoNs want to be able to update their PI info directly (rather than send in email). UMD will look into adding that capability.

Once entered, baseline comments will be automatically maintained month to month, until changed by projects, so that they can reflect history of changes, e.g. changes in how a particular metric has been collected.

Greg Hunolt will enter existing baseline comments (i.e. those provided by projects during the last year) into each project's October 2006 metrics report (by the December 15 reminder date for November metrics reports) so projects do not have to re-enter them. Projects can then change them as desired.

Paul Davis recorded a set of changes that will be considered for the new Web site / Metrics Tool. This will be New Action 7.

6. Glenn Schuster briefed on education survey (*)

 Survey questions are now being developed.

 Survey development supported by 6 REASoN education projects.

Coordinating with Ming-Ying Wei, Glenn's study manager, who will circulate survey questions for review by all of 'her people'.

Survey request for approval to OMB targeted for submission around March 2007

Development of survey tool could take 6 – 7 weeks, possibly longer

7. Various MPARWG Topics / Questions

 Do we need more people in WG?

We should participate in, and get feedback from, other ESDS Working Groups. Other ESDSWG groups have raised questions of metrics for re-use and services that will involve MPAR-WG.

We may consider using a Web collaboration tool, like a Wiki, to improve metrics WG collaboration and feedback

Frank Lindsay and Kathy Fontaine stated that metrics data will be used to make future decisions on data systems strategy. The quality of metrics data will impact past performance.

Glenn Schuster – education REASoNs having to use "NEEIS" system, up in the air for now. Glenn noted that it is good that the existing metric 10 allows other REASoNs to indicate their support for education.

Show projects they have real stake in metrics reporting, now and in the future.

Frank Lindsay – need to show projects' impact / benefit to science, support to SMD, e.g. via nuggets.

Kathy Fontaine – projects should not be concerned that study managers don't access their metrics month by month – they can assume that HQ will make use of the information in some form as needed, e.g. for justifying the spending on these projects, including the current REASoN and ACCESS projects and future REASoN projects.

Results: 1) don't worry about study managers accessing or not accessing the metrics website, 2) assume Frank and Martha are looking at the information, 3) Action - Frank, Rama to look at format for summary reports.

Action Item 6: Frank, Rama, Paul to look at content / format for project summary reports.

Consider possible use of web 'crawlers' to aid in metrics collection (related to Gallagher action item).

Frank Lindsay – with project's consent, make broader distribution of impact metrics, e.g. through Dave Herring (Kathy Fontaine – project consent indicated by check box would trigger follow-up before wider use). This was made New Action 4.

Frank Lindsay – comment for plenary – we are working on services, we welcome suggestions as to what services might be included.

8. Examples of services that projects are now providing

Kathy Fontaine - what set of things are we going to watch for re service metrics.

Paul Davis – subsetting, reformatting, re-projecting, generation of higher level products, customer service, help desk.

Pat Hrubiak – user services, on-line interactive subsetting / graph plotting.

Brian Rogan – Webster 'click and pick' map to access satellite imagery, used by schools. Making available free-ware to schools to aid in display and interpretation of satellite imagery. Web site offers services.

Thor Anderson – Model outputs for National Park Services – e.g. snow pack model. Visualization, e.g. of wildlife migration superimposed over snow pack. NPS kiosks now host. Website offers services for education, general users, more under development.

Clyde Brown – digital atlas, statistical analysis of aircraft data.

Rama – wary of confusion between products and services.

Ron Weaver – tailored ordering interfaces, user support/help desk, tools that subset, reformat aggregate, documentation. News etc outreach, near-real-time tailored. Moderate bulletin boards.

Jim Gallagher – suite of web portals, science-thematically organized, intended to be first place a grad student would go to discover types of data, access data, fitting a theme. User support for OpenDAP sites. Wiki discussion forums, email lists, moerating bulletin boards.

Glenn Schuster – package of curriculum material and training, provided on CD, for students to learn about earth science. Books, science and math items.

Frank Lindsay identified candidate Service Categories based on projects' descriptions, these are listed in Rama's 11/16 Plenary Summary.

November 15, PM

9. Focus on ACCESS Projects

When does ACCESS reporting start? This will depend on the project, e.g. when projects actually get funding and begin work.

Steve Kempler – suggested relevant publications as a metric; this was seen as a good project-specific metric.

Greg Leptoukh – has concerns regarding reporting for a distributed system. (WG will study distributed systems and metrics collection through Action Item 1.)

How to demonstrate how we support science? Ideas: impact metrics, maybe an annual roll-up of impact metrics, etc., similar to the DAAC yearbook.

November 16, AM – Plenary Session

10. MPARWG Summary Overview – Rama (*)

Rama stated that we now have a set of stable metrics but the WG will be open to forward-thinking, new changes. Emphasis will be on defining and collecting service metrics.

Rama stressed the importance of Impact Metrics and asked for greater reporting from the projects.

Rama also briefed on An Enhanced Metric Philosophy, the WG's FY2007 Work Plan, and new Action Items.

Karen Moe raised the issue of peer review publications and asked that Technical Infusion and Metrics WGs look at the issue together. Rama will discuss this further with Karen.

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